



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: RTCA DOCUMENT DO-160D

Date: 7/21/98

Initiated By: AIR-130

AC No: 21-16D

Change:

1. PURPOSE. This advisory circular calls attention to RTCA, Inc (formerly Radio Technical Commission for Aeronautics) Document No. **DO-160D**, "Environmental Conditions and Test Procedures for Airborne Equipment, " dated July 29, 1997, and discusses how the document may be used in showing compliance with airworthiness requirements.
2. CANCELLATION. Advisory Circular **21-16C**, Radio Technical Commission for Aeronautics Document **DO-160C**, dated February 14, 1990, is canceled.
3. RELATED FEDERAL AVIATION REGULATIONS (FAR). Federal Aviation Regulations, part 21.
4. BACKGROUND. DO-160D defines a series of standard environmental test conditions (categories) and applicable test procedures for airborne equipment. The purpose of these tests is to provide a laboratory means of determining the performance characteristics of airborne equipment in environmental conditions representative of those which may be encountered in airborne operation of the equipment.
5. USE OF RTCA DOCUMENT NO. DO-160D.
 - a. An applicant for a Technical Standard Order (TSO) authorization for airborne equipment may use the conditions and procedures prescribed in DO-160D in lieu of the corresponding conditions and procedures specified in a TSO if it is shown that:
 - (1) Conditions and procedures used are those prescribed in DO-160D.
 - (2) The substitute test procedures from DO-160D provides an equivalent level of safety.
 - (3) The applicant requests approval to deviate in accordance with the requirements of FAR Section 21.609.
 - b. An applicant for a Type Certificate or Supplemental Type **Certificate** may use **DO-160D** to show compliance with appropriate airworthiness requirements. DO-160D is an acceptable means, but not the only means, for any environmental qualification.

6. AVAILABILITY OF RTCA DOCUMENT NO. DO-160D. Copies may be purchased from RTCA, Inc, 1140 Connecticut Ave., NW, Suite 1020, Washington, DC 20036.



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